

a press controller coupled to the press machine and the sensor, wherein the controller processes a measurement signal from the part measurement sensor of the critical dimension of the part, compares the measurement signal to a predetermined threshold value, and generates a command signal to the press machine to adjust the forming rail based on the measurement signal;

wherein the forming rail is coupled to a servo controllable by the press controller to change the height of the forming rail based on the measurement from the sensor of the critical dimension of the part and further wherein the upper die includes a knocker that contacts the forming rail to form the critical dimension of the part.

14. (Twice Amended) A part measurement system comprising:

a press machine including a lower die coupled to an upper die, wherein the lower die includes a top surface supporting a strip of material to be formed into a part after a stripper plate coupled to the upper die contacts the strip of material;

a part measurement sensor located in the lower die, wherein the sensor measures a critical dimension of the part;

a part forming rail coupled to the lower die, wherein the forming rail and the upper die form the critical dimension of the part; and

a press controller coupled to the press machine and the sensor, wherein the controller processes a measurement signal from the part measurement sensor of the critical dimension of the part, compares the measurement signal to a predetermined threshold value, and generates a command signal to the press machine to adjust the forming rail based on the measurement signal;

wherein the forming rail is coupled to a servo controllable by the press controller to change the height of the forming rail based on the measurement from the sensor of the critical dimension of the part and further wherein the upper die includes a knocker that contacts the forming rail to form the critical dimension of the part.

22. (Twice Amended) A method of measuring a critical dimension of a part in a press machine, the method including the steps of:

feeding a strip of material through the press machine, wherein the machine includes a lower die coupled to an upper die and the lower die includes a top surface supporting the strip of material;

forming the strip of material into the part, wherein a stripper plate coupled to the upper die contacts the strip of material and the upper die punches the strip of material;

measuring the critical dimension of the part with a part measurement sensor located in the lower die;

processing a measurement signal from the part measurement sensor of the critical dimension of the part, wherein a press controller compares the measurement signal to a predetermined threshold value, and generates a command signal to the press machine; and

adjusting a forming rail coupled to the lower die based on the command signal from the press controller;

wherein the forming rail is coupled to a servo controllable by the press controller to change the height of the forming rail based on the measurement from the sensor of the critical dimension of the part and further wherein the upper die includes a knocker that contacts the forming rail to form the critical dimension of the part.

32. (New) The measurement system according to claim 1, further comprising a stepper element having multiple steps of differing heights disposed between the forming rail and the servo and driven by the servo to change the height of the forming rail in a step-wise manner.

33. (New) The measurement system according to claim 11, further comprising a stepper element having multiple steps of differing heights disposed